THE JOURNAL OF SCHOOL HEALTH

Vol. XXX No. 5

MAY
1960

C. Morley Sellery, M.D.
1467 Oakhurst Drive
Los Angeles, Calif.

PUBLISHED BY
THE AMERICAN SCHOOL HEALTH ASSOCIATION

AMERICAN SCHOOL HEALTH ASSOCIATION

Organized 1927

Devoted to the interests and advancement of those engaged in school health activities and the service rendered by them

Officers of the American School Health Association
October, 1959 to October, 1960

President:
Lyda Smiley, R.N., M.A., LaMesa-Spring Valley School District
LaMesa, California

President-Elect:
Leland M. Corliss, M.D., Board of Education, Denver 2, Colorado

Vice President in Charge of Program:
J. Keogh Rash, H.S.D., University of Indiana, Bloomington, Indiana

Vice President in Charge of Membership:
Donald J. Ludwig, H.S.D., University of Indiana, Bloomington, Indiana

Executive Secretary:
A. O. DeWeese, M.D., 515 E. Main St., Kent, Ohio

Treasurer:
Warren Southworth, Dr. P. H., University of Wisconsin, Madison 6, Wisconsin

Editor:
Delbert Oberteuffer, Ph.D., Ohio State University, Columbus 10, Ohio

GOVERNING COUNCIL

Term Expiring 1960

Florine Thomason, R.N.,
Richmond, Virginia
Edward B. Johns, Ed.D.,
Los Angeles, Calif.
Abram Cohen, D.D.S.,
Philadelphia, Penna.
Austin E. Hill, M.D.,
Houston, Texas
G. Robert Koopman, A.M.,
Lansing, Michigan

Term Expiring 1961

Leo Feichtner, M.D.,
Albany, New York
Elsa Schneider, M.A.,
Washington, D.C.
Ross Gutman, D.D.S.,
Albany, New York
W. K. Streit, M.A.,
Cincinnati, Ohio
Dorothy Tipple, S.N.T.,
Albany, New York

Term Expiring 1962

Mildred Doster, M.D.,
Denver, Colorado
Perry Sandell, M.Ed.,
Chicago 11, Illinois
H. S. Hoyman, Ed.D.,
Urbana, Illinois
Helen Watson, R.N.,
Hartford, Connecticut
May Hare, M.A., Topeka, Kansas

By Special Vote of Governing Council

J. A. Myers, M.D.,
Minneapolis, Minnesota

Past Presidents, Ex-Officio

All active past presidents are voting members.

Affiliated Associations

American Association for Health, Physical Education and Recreation
William H. Creswell, Jr., Ed.D.
New York State Dental Hygiene Teachers Association
Mrs. Mary Hutton, D.H.

Constituent Associations

Michigan School Health Association E. J. McClendon
California School Health Association
Ina Lundh
New Jersey State School Nurses Association, Evelyn Joyner, R.N.
New York Association of School Physicians, C. Adele Brown, M.D.
New York School Nurse-Teachers Association
Virginia Thayer, S.N.T.

THE JOURNAL OF SCHOOL HEALTH
Vol. XXX MAY, 1960 No. 5

CONTENTS

Health Education Preparation of Elementary Teachers in Illinois 175
Gertrude B. Couch, Ph.D., and Ray Anne Schrader, M.S.

A Report on the Role of the Dental Hygienist in Schools 182

News Notes of Interest 196

The President's Page—Threats to School Health—Fact or Fancy? 201
C. Morley Sellery, M.D.

Trenton, New Jersey State College Gives a B.A. in School Nursing 204

Echoes from the Past 205
Elena M. Sliepcevich, D.P.E.

Pre-Convention Medical Meeting 211

THE JOURNAL OF SCHOOL HEALTH
THE AMERICAN SCHOOL HEALTH ASSOCIATION
Published monthly, except July and August, at Columbus, Ohio

Editor
DELBERT OBERTEUFFER, Ph.D.
337 West Seventeenth Avenue
The Ohio State University
Columbus 10, Ohio

Assistant to the Editor
DONNA L. RAINEY

Executive Secretary
A. O. DeWEESE, M.D.
515 East Main Street
Kent, Ohio

SUBSCRIPTION RATES TO THE JOURNAL
Membership dues, $4.00 including Journal; Single copies 50c, send payment with order

No part of any article appearing in this issue may be used or reproduced in any manner whatsoever without written permission of the Editor—except in the case of brief quotations embodied in the article or review.

Second Class Postage Paid at Columbus, Ohio

Printed by THE SPAHR & GLENN COMPANY
50 East Broad Street Columbus 15, Ohio

REPRINTS

Reprints are available in lots of 100 or more and must be ordered within twenty (20) days after issue of the *Journal* in which the article appears. Prices are dependent on the length of the article, including space occupied by cuts and other illustrations.

No. of Pages	2	2–4	5–8	9–12
100 copies	16.46	25.66	43.99	58.65
Add'l. 100's	1.46	2.60	3.33	5.26

Address all inquiries concerning reprints to:

THE SPAHR & GLENN COMPANY
50 East Broad Street
Columbus 15, Ohio

★ ★ ★

CHANGE OF ADDRESS

Send your new address at least 4 weeks before the date on which it is to become effective, to

The Journal of School Health
515 East Main Street,
Kent, Ohio

Please send old address with the new, enclosing, if possible your address label. Addresses must include zone number.

★ ★ ★

MEMBERSHIP APPLICATION AND JOURNAL SUBSCRIPTION

American School Health Association

I, ..., hereby apply for membership in the American School Health Association and enclose $4.00 for annual membership dues, including a year's subscription to the Journal of School Health.

Date..... (Signed) .....

....
Official Position Address

.....

Date.....

Please fill out and send with check to A. O. DeWeese, M.D.. Secretary and Treasurer, 515 East Main Street, Kent, Ohio.

Members of three years' standing are eligible for Fellowship—dues $8.00

THE JOURNAL OF SCHOOL HEALTH

Devoted to the interests and advancement of school health service and instruction. Your participation by membership is solicited.

Vol. XXX MAY, 1960 No. 5

HEALTH EDUCATION PREPARATION OF ELEMENTARY TEACHERS IN ILLINOIS

GERTRUDE B. COUCH, Ph.D. and RAY ANNE SHRADER, M.S.
University of Illinois

A prime responsibility of modern schools, widely accepted for many years, is the maintenance and improvement of the health of school children. This problem is often assigned to the health teacher, the school nurse or the doctor. It is, however, an equally important concern of classroom teachers, the principal and all others who come in direct contact with pupils in the school.

Are most of these teachers adequately qualified professionally to assume their responsibilities in guiding the health of school children? Do they themselves have the basic knowledge and understanding of biological and/or physiological functions, and the common deviations which may occur? Are they familiar with the characteristic physical trends and developmental phases through which boys and girls pass at various ages from childhood through adolescence? Can they identify the major health problems or discover the predominant health interests and concerns of their pupils? Have they learned how to apply their knowledge of sound mental health and emotional adjustment to the needs of children they face daily in the classroom? With what resources and teaching techniques pertinent to health instruction are they familiar? Do they know *how* health should be taught, *what* should be included and *when* it should be offered? Do teachers recognize and accept their unique role and contribution to the total school health program?

Some important answers to these questions may be found by a careful evaluation of the pre-professional preparation in health education being offered teachers and administrators today. Many educational groups have been doing this very thing in recent years.[1, 2] One such group is the Illinois Joint Committee on School Health which undertook a survey of teacher-education preparation in health as a preliminary guide for a state-wide conference on this subject held at Allerton, Illinois in November, 1958.

The primary purpose of the conference was to call upon state-wide leaders in education and in health to make recommendations for a guide to be used in Illinois for pre-professional health education. It was felt that a survey and analysis of the present curricular emphasis on this subject would facilitate this purpose by (a) providing a basis of under-

[1]American Association for Health, Physical Education and Recreation, *Health Education for Prospective Teachers, a Guide to Action*, (Washington D.C.: The American Association for Health, Physical Education and Recreation, 1956), p. 41.

[2]John F. Allanson, "School Health Preparation of Prospective Teachers", *The Journal of School Health*, Vol. XXIX, No. 5, (May 1959); pp. 196-203.

standing from which the conference delegates could proceed, (b) motivating both the colleges involved and their respective delegates to evaluate their own curricula and (c) involving education leaders as well as health specialists in a consideration of health preparation of teachers.

With these aims in mind, a questionnaire was developed and sent to forty-seven institutions of higher education in Illinois which offer elementary teacher-education. Responses from forty-two, or 89% of the schools were obtained.

The questionnaire was designed to obtain the following information:

1. The courses or units offered in *foundation areas relating to health* including: the structure and function of the body, heredity, general psychology, principles of learning, child development (both physiological and psychological), personal hygiene, nutrition, mental hygiene, and alcohol and drugs. Additional information was obtained as to whether these areas were considered to be adequately emphasized, over-emphasized, or under-emphasized.

2. The courses or units offered in *professional health areas* including: organization and administration of school health, methods and materials in health education, emergency care, health problems of school children, and the role of teachers and others in school health. Again opinions of felt adequacy or inadequacy of preparation in each area were obtained.

3. The opportunities for observation or participation in school health experiences offered pre-professional students in the following areas:

a. Health services—i.e. use of health records, parent conferences, nurse services, observation of children, screening examinations for vision, hearing, etc., physical examinations and visits to community agencies;

b. Health instruction—i.e. either direct health teaching, or incidental instruction;

c. Healthful school living—i.e. the school lunch facilities, custodial services, safety and fire regulations, and school and playground facilities.

Summary of Results

1. *Foundation Areas Related to Health*—General psychology was the only *course* which was found to be offered nearly universally by all institutions responding. Even personal hygiene, often considered to be of broad general applicability, was required in only half of the institutions preparing prospective teachers in Illinois. Some course in physiology and/or anatomy was required by four out of ten teacher education institutions, but all other health-related courses were offered by less than 25% of the schools and colleges. It can be seen that at present there exists no "basic core" of courses which could in any measure be considered to prepare teachers for this aspect of their future school responsibility.

However, five of the ten foundation areas suggested on the questionnaire are offered by better than 50% of the colleges as *units* of more inclusive courses. An apparent inverse relationship exists between whether a given health area is taught as a unit of a course or as an entire course. (see Figure 1)

As can be seen by Table 1, no consideration of the use of alcohol and drugs is included, either by course or unit, in 34% of the elementary curricula although state laws require instruction in this particular phase of health education. Knowledge as to the structure and function of the body, personal hygiene, nutrition, mental hygiene, and the physiological

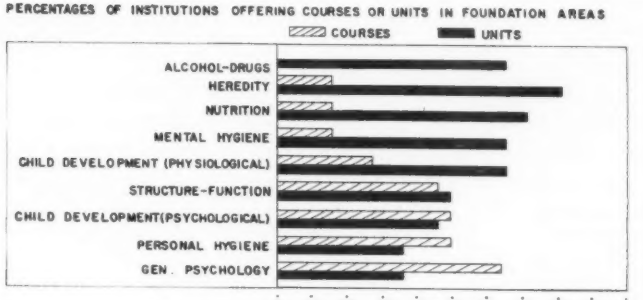


FIG. 1

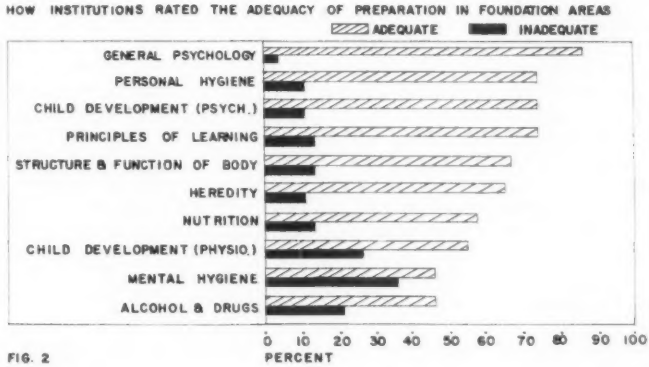


FIG. 2

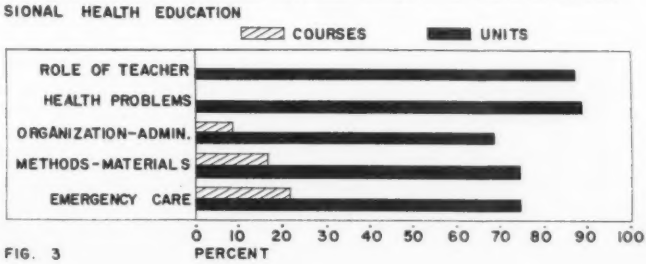


FIG. 3

aspects of child development is completely lacking in the curricula of between 10% and 20% of the teacher education institutions surveyed.

TABLE 1. NEITHER COURSE NOR UNIT OFFERED

AREA	Percentage	AREA	Percentage
Alcohol and Drugs	34	Structure and Function	11
Mental Hygiene	21	Heredity	8
Nutrition	16	Psychological Child Development	5
Personal Hygiene	13	General Psychology	3
Physiological Child Development	11	Principles of Learning	0

A pertinent question in relation to the pre-professional preparation of teachers would seem to be, "How adequate do the faculty in teacher-education institutions feel this preparation is?" Although awareness of inadequacy does not always eventuate in change and improvement, due to many other deterring factors, it must be self-evident that no possibility of improvement exists without at least initial awareness.

Approximately three quarters or more of the colleges (see Figure 2) indicated satisfaction with the amount of instruction offered in general psychology, principles of learning, personal hygiene, and child development (from the psychological viewpoint). Satisfaction with the other six areas was expressed in lesser degree, ranging from a little less than half the schools (47%) to about two-thirds (68%). The major areas felt definitely to be inadequate or underemphasized were physiological aspects of child development, mental hygiene, and use of alcohol and drugs.

2. *Professional Preparation in Health*—Five areas of emphasis were suggested in the second part of the questionnaire concerning courses or units in professional preparation for health education. As can be seen in Figure 3, emergency care, or first aid, was found to be required of the elementary education students in greatest frequency (21%).

However, all five suggested topics are offered as units, or parts of a course, in considerable frequency. There is a range of from 63% to 89%, with a mean value of 75% of all college curricula including these topics as units in teacher education preparation.

An interesting result of this survey was the divided opinion expressed by respondents as to the adequacy of professional preparation in health in teacher education. On the average, approximately 41% of the schools considered it to be adequately emphasized.

The remaining respondents were equally divided between those who felt the health preparation to be under-emphasized, and those who could give no answer, or were presumably either unwilling or unable to formulate any opinion. Perhaps this indicates the need for more in-service education of teacher-education faculty. (see Figure 4)

3. *Professional Laboratory Experiences in Health*—The third and final phase of this study was an effort to ascertain what opportunities prospective teachers were having to put their health education preparation into practice—(a) what opportunities to observe or actually assist in some of the many aspects of health services were given; (b) what chance to observe

HOW INSTITUTIONS RATED THE ADEQUACY OF PREPARATION IN PROFESSIONAL HEALTH EDUCATION

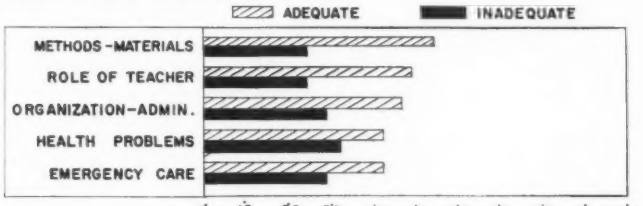


FIG. 4

PERCENTAGE OF INSTITUTIONS OFFERING LABORATORY EXPERIENCES IN HEALTH INSTRUCTION

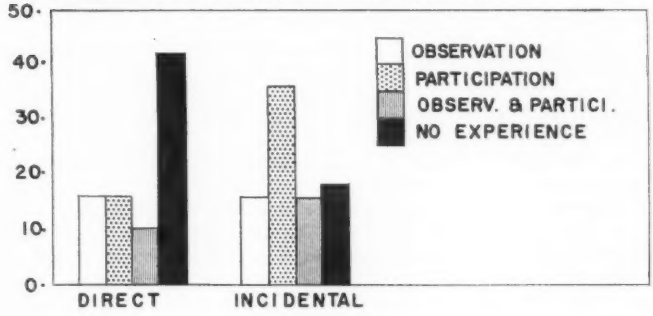


FIG. 5

PERCENTAGES OF INSTITUTIONS OFFERING LABORATORY EXPERIENCES IN HEALTH SERVICES

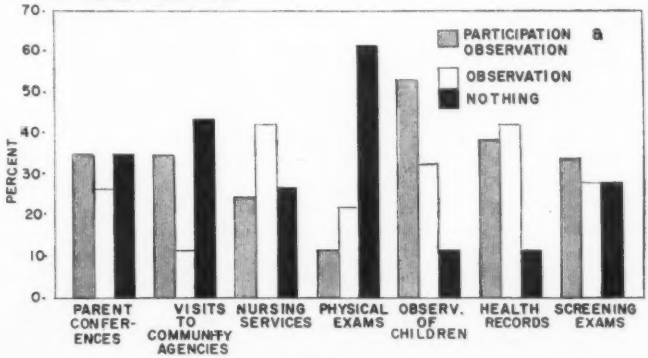


FIG. 6

the relationships between healthful school living and overall school health program was provided; and (c) what, if any, opportunities to do some student-teaching in health existed.

Figure 5 graphically presents the opportunities provided for prospective teachers to actually do some health teaching. Although 16% of the colleges think their students may at least observe some incidental or planned health teaching, only *26% of the schools* offer any opportunity for them to do actual planned health teaching themselves. Forty-two percent indicated definitely that *no* opportunity for health teaching was available to the prospective teacher; 18% felt there was not even an opportunity for incidental health instruction.

Elementary education majors had the greatest opportunity to actually participate in health service activities in the following rank order. (see Figure 6)

Observation of school children	53%
Use of health records	39%
Giving screening exams	34%
Conducting parent conferences	34%

They were provided the least opportunity (neither participation nor observation was included) in the following areas:

Assisting with physical examinations	61%
Visiting community agencies	44%

The last section of phase 3 was an inquiry into opportunities prospective teachers were given to participate in or at least observe those aspects of healthful school living that bear on the child's total health. A brief perusal of Figure 7 immediately indicates the general trends—activity was limited to observations, primarily, as far as school and playground environment, custodial services, and school lunch were concerned. The only category where actual participation occurred in greater frequency (57%)

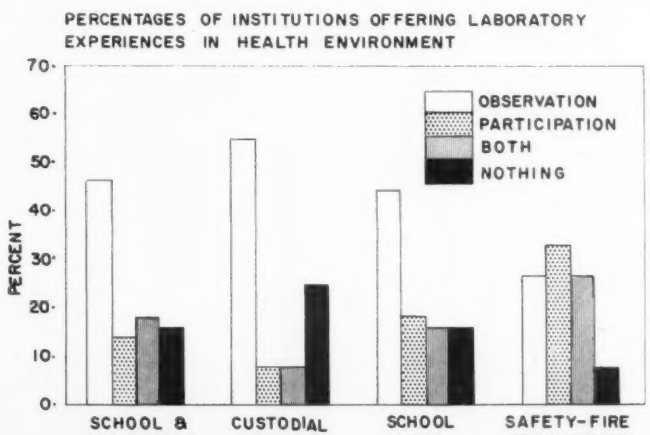


FIG. 7

was in regard to safety and fire regulations. Perhaps once again the effect of state regulations and minimum fire protection laws has its measurable effect. If this assumption is correct however, one wonders why 43% of the prospective elementary teachers, still had no opportunity to participate in a fire protection program.

Conclusions and Implications

Although the purpose of this survey was primarily to provide working data and motivation for a two-day conference of teacher-education specialists throughout the state of Illinois, it seems pertinent to summarize the findings, and draw some tentative conclusions therefrom. Progress to date in Illinois indicates a real concern for improved health preparation of future teachers. Many of the presumably unresolved problems in this state are not unlike those of other states in the nation.

The following conclusions may be drawn from this survey:

1. All colleges provide at least some minimal preparation in health to prospective teachers.
2. All institutions indicated a feeling of dissatisfaction with one or more aspects of pre-service health preparation of their students.
3. There was no universal agreement as to any "core group" of health courses or units of health in courses essential for teacher preparation.
4. There was an overall greater feeling of adequacy in the foundation areas of health (mean score, 65%) than in the professional health education courses or units (mean score, 47%).
5. Although elementary teachers are expected to assume the major responsibility for health instruction in their classrooms, very few (26%) are given any student teaching experience in this area.
6. There is a noticeable lack of opportunity for prospective teachers to take an active part in school health services and to do more than observe aspects of healthful living in schools.

Conference delegates who studied the returns from this questionnaire were immediately impressed with the need to work toward an improvement in pre-professional health preparation, both in their own schools, and in the state, at large. Suggestions for both curricular changes in pre-service education, and graduate courses and work shops offered by teacher education institutions were proposed. A core of understandings and competencies, as recommended by national conferences, was approved as desirable in all teacher education. Further local and regional conferences to follow-up and implement state recommendations were urged.

It can certainly be hoped that Illinois and other states as well, will continue their active interest in problems of health preparation for their teachers. Though progress is admittedly slow, there has long been unanimity of agreement as to the need for improvement in this area. A desirable first step is one such as is described in this paper—a joint assessment of the present status and problems of teacher preparation in health. From this action may come suggestions for improvement in both pre-service and in-service opportunities for health education. The last and most significant step—implementation of these suggestions—must then be taken. Only at that point can we be truly satisfied that real progress has been made and that the children in our schools will be able to profit from health guidance by properly qualified teachers.

A REPORT ON THE ROLE OF THE DENTAL HYGIENIST IN SCHOOLS*

The Committee on Dental Health Programs in the Schools

Dr. Hugh M. Averill
Dr. Elmore A. Bob
Dr. Abram Cohen
Miss Ann C. Faivre
Dr. Samuel Greenberg
Dr. Harold R. Harlan
Mrs. Mary Y. Hutton
Dr. Francis J. Livingston
Mr. Perry J. Sandell
Dr. Ross E. Gutman, Chairman

Resource Consultants to the Committee

Dr. Wayne T. Branom
Dr. Roscoe C. Brown
Miss Mildred Coyle
Dr. Wesley P. Cushman
Dr. Lillian B. Davis
Dr. Mildred Doster
Miss Annette Eveleth
Miss Irma Fricke
Dr. W. Wendell Hoover
Miss Victoria Krohr
Miss Sybil Newbold
Lloyd Richards
Mrs. Elinore H. Schmidt
Miss Greta Yaeger

Cooperating Organizations

American Council on Education—Commission on the Survey of Dentistry in the United States
American Dental Association
American Dental Hygienists Association

Introduction

The major purpose of this pilot study is to explore some of the facets of currently operating school dental hygiene programs throughout the country. The role of the dental hygienist is the main concern of the Committee. It is evident that a closer examination of her activities will provide basic background information from which an overall appraisal of school dental hygiene services may be made and general recommendations for future evaluations developed. Because of its exploratory nature, the survey did not attempt arbitrarily to limit the phases under study, but rather attempted to include a broad scope of activities.

This foundation is essential before we can expect to understand better the contributions of the school dental hygienist in promoting more effective school health programs. A preliminary report (1) reviewed basic problems of dental health and disease; and the preliminary planning and limitations of the project. The findings revealed in this study may encourage health and education authorities to focus greater attention on the growing problems of children's dental needs, stressing the importance of providing adequate educational and preventive services at an early age in life.

Health handicaps may impair the child's general growth and development. Without a knowledge of adequate health practices, he may later become progressively incapacitated for education or for remunerative

*Submitted to the Association at the annual meeting at Atlantic City, New Jersey, October 1959 and approved for publication by the Committee on Study Committees and the Executive Committee in March of 1960.

occupation. By definition, a dentally handicapping condition is one which may result in disfigurement or speech defects, or lead to such severe structural deformities, psychological disturbances or systemic maladies that may present a serious obstacle to normal development, education or employment opportunities later in life. (2) An innocuous-appearing carious tooth has no self-reparative powers and, unless treated, will be lost.

Adding to the difficulties are family and social attitudes as well as fear and indifference.(3) Problems of motivating behavior regarding dental care have received some investigation.(4) Other studies have explored to a limited extent the value of the school examination and other services of the dental hygienist and school nurse as compared with "incidental" dental health instruction by the classroom teacher.(5)

Only 22% of the school systems with health programs engage dental hygienists.(6, 7) The majority of personnel involved in school dental activities are dentists, physicians (mainly part-time) and nurses. Extensive investigation of their roles, as well as the participation of classroom teachers and others on the staff may reveal useful comparative data for overall appraisal of, and recommendations for, improving dental health programs.

The nature of the mailed survey does not lend itself to a qualitative analysis of school services. However, up to this point, the Committee has been more concerned with procedures than evaluations and recommendations. The aim is to obtain first-hand information from the dental hygienist by the most feasible approach. Hence, the transmittal letter to school administrators requested that the questionnaire be completed by the dental hygienists in their districts. Further, a preliminary mailing to state health and education authorities encouraged their cooperation.

Forty-six percent of the sampled hygienists responded and of these, 67% were from New York State, Pennsylvania and Connecticut. This reflected the large proportion of dental hygienists employed by local agencies (including school systems) in these states, as compared to the rest of the country.(8) Therefore, geographic distributions of the data were grouped by these three states, and 17 "other states" including the District of Columbia.(9) (Table 1)

The data from the questionnaires cover a broad range of activities of 201 school dental hygienists. These included: background professional education, experience, qualifications; present employment conditions, contract agencies, salaries, school and pupil load ratios; dental hygiene, instructional and follow-through services; staff and public relationships; special problems, recommendations, and an abundance of descriptive material. Variations in the frequency distribution of the data were observed and the significance of the variations analyzed assuming that deviations from the average exceeding two standard errors were significant.

Observations

Information on college education and certification of dental hygienists gives some indication of their education and special training required for school service. Tables 2 and 3 compare these attainments by geographic location. About 37% of the respondents had more than two years of college. Pennsylvania had a significantly high proportion (11%)

within the "5 or more" year-group of professional education, while 61% of the Connecticut sample indicated only one year of college.

Few states have school programs with certified dental hygiene personnel. New York established certification in 1927, and other states followed more recently. Many schools waived requirements for personnel who were employed prior to the introduction of certification for dental hygienists. New York showed a relatively small proportion (5%) without school certification; Connecticut had 50% and "other" states, 56% in this category (Table 3).

Connecticut has only recently established eligibility requirements for dental hygienists. A candidate is awarded a provisional certificate after earning her bachelor's degree or equivalent, including at least 6 semester hours credit in professional education courses, and other qualifications. The standard certificate is granted to the dental hygiene teacher after 3 years of school service in a provisional status, and a master's degree that includes up to 15 hours in recognized educational courses.

New York requires candidates for provisional certificates to have 6 semester hours of approved courses in education included with the two-year basic dental hygiene training. After 5 years of school experience, the dental hygiene teacher is expected to have earned 12 additional hours of professional educational courses to qualify for permanent status. Additional in-service credits are necessary periodically to maintain her status.

Pennsylvania encourages dental hygienists with standard limited certificates to earn provisional and permanent college certificates. The limited certificate is issued to the licensed graduate upon completion of one year of approved internship and is valid for 3 years. It may be renewed upon completion of 12 semester hours of preparation within this period. To qualify for a provisional college certificate the candidate must be a graduate of a four-year teachers college. A permanent certificate may be granted after three years school experience and 6 semester hours of additional college credits.

The time interval since the last course may also give some insight of school requirements (Table 4). Seventy per cent of the total respondents had their last course within a five-year period. This compares with New York's 85%. Connecticut and Pennsylvania showed high proportions, 40% and 34% respectively, in the "10 years and over" interval bracket. Significantly 47% of the dental hygienists from Pennsylvania had their last training sessions within one year.

Correlating years of experience other than in schools, with school work (Table 5) showed 43% of those having office experience were in schools less than 5 years. However, the schedule made no provisions to distinguish part-time workers or whether such services occurred concommitant to school work on a part-time basis. A sharp change occurred in the numbers with experience in government service, and 5 or more years in schools. A significant decrease was also apparent for those with office experience, and having 10 or more years school service.

The type and extent of affiliation with professional organizations may be a criterion of qualification for school work (Table 6). All states showed high proportions of membership in local and state school and health groups. Twenty-five per cent of the total affiliations were with the American Dental Hygienists Association. Of the total affiliations in

"other" states, 34% were with the A.D.H.A. while New York showed only 19% with membership. The next largest national affiliation in New York was with the American Association of Health, Physical Education and Recreation. Twenty-two per cent of the Pennsylvania dental hygienists were members of the National Education Association as compared with an average of 9% of all areas.

Most of the dental hygienists (85%) were employed by schools, including all from Pennsylvania and 95% from New York. However, Connecticut and "other" states had almost a third each of their personnel under contract to Boards of Health or were employed part or full time by local or state agencies other than education (Table 7).

Tables 8, 9, 10 and 11 correlate salaries with years of experience, employment agencies, previous college education and geographic areas. As previously pointed out, a few respondents were part time in the schools. Those in the higher income brackets were in most part municipal, regional or state supervisors responsible for services of other dental hygiene personnel. Boards of Education appeared to pay the highest salaries, averaging $4,600 annually, as compared to $3,900 for Boards of Health, and other agencies (Table 9).

Some correlation existed between salary increases and years completed in college. Forty per cent of the dental hygienists with 5 or more years of college were earning $5,000 to $6,000. However, this group represented only 5% of the total sample, implying limitations in opportunities to progress. The fact that 40% of the "5 or more years" category were still earning $4000 to $5000 is further evidence of this probability (Table 10). The average salary for New Yorkers was just over $5000, as compared to $4500 for Pennsylvania, and $3550 for Connecticut, and $4100 for "other" states (Table 11). The general practice in New York is to start on the lowest salary schedule for teachers, with increments earned from in-service training, further education and experience.

Thirty-seven per cent of the dental hygienists were responsible for 10 or more schools (Table 11). Thirty-eight per cent had from 5 to 9 schools, and 25% had fewer than 5 schools. New York led the others with 42% having fewer than 5 schools. Almost two-thirds of the respondents from "other" states served 10 or more schools. Pupil load ratios varied, especially in the upper and lower ranges (Table 13). Close to 60% of the questionnaires indicated pupil loads from 1000 to 3000 pupils annually. Only 1% of the N. Y. group had loads under 1000 in contrast to 7%, 12% and 11% from Penn., Conn., and "other" states. These included a few part-time school workers. About equal proportions of the N. Y. and Penn. samples (70%) served from 1000 to 3000 children, in contrast to Conn., and "other" states 41%. Only 6% of the respondents from Penn. were responsible for more than 4000 pupils while 14% from N. Y. were in this category. This contrasts with 24% from Conn. and 38% from "other" states.

Significant variations in services between grade groups were apparent (Table 13). The most frequent services were "inspections only," and "inspections and dental prophylaxes," totaling 84% of the sample. Not quite 9% of the grades received topical fluoride prophylaxes. The remaining 7% had dental prophyalxes only. Forty-one percent of the primary grades received inspections only, as against 56% and 61% respectively of the junior and senior grades. On the other hand, combined

inspections, cleanings and topical fluoride prophylaxes were given to 51% of the primary grades, 37% of the junior high, and 32% of senior high grades. Not all children in all grades received services, depending in large measure on whether they were under professional care. Dental hygienists were assisting school dentists in treatment of children in 79% of the primary grades, 16% and 5% of the junior and senior grades respectively.

Education by grade-group revealed that children of 58% of the 2613 grades received some form of instruction. In a few instances this was given without dental hygiene services. Both chairside and classroom teaching were provided to 28% of the grades. Junior high grades had a significant 24% receiving chairside instruction, and 11% getting both chairside and classroom teaching. Fifty-six per cent of the junior grades had no educational services. Equally neglected were 77% of the senior high grades. In contrast, only about one grade in five of the primary group had no service, and 46% received both chairside and classroom instruction. (Table 15).

Regular classroom teaching was assigned to 40% of the total sample of 201 dental hygienists. Forty-seven per cent considered their class instruction as occasional assignments. In neither category was there any specific discrimination of frequency. Only 3% of the N. Y. sample had no class teaching in contrast to 30% for Conn., 23% for Penn., and 13% for "other" states. Penn. had a significantly low (30%) proportion with occasionally scheduled classes (Table 16). Fifteen to 30 minutes was the most frequently scheduled period (61%) of class teaching (Table 17).

To some degree follow-through response as indicated by the return of referral "under care" forms by parents, is a criterion of the effectiveness of school services (Table 17). All states except N. Y. and Penn. showed significantly low follow-through by parents. Seventy-one per cent from N. Y. far exceeded probability by chance alone. A relatively high proportion of children in "other" states received clinical services, as compared to the three states. This may in part be attributed to emphasis on clinical services by schools or outside agencies for children unable to afford private care.

It is obvious (from Table 18) that only a small percentage of the total pupil registration was being referred, much below expectations of those needing treatment. It is also apparent that a large fraction of these children were not seen by the dental hygienists. Forty-two per cent of the referred children did not receive any follow-through care. Of these, 64% came from Conn., 45% from Penn., 24% from N. Y., and 57% from "other" states.

Conference and professional contacts with other staff members are a necessary function for normal relationship and cooperation (Table 18). Regular or occasional conferences were most common in N. Y. as compared with other states. On the other hand, N. Y. exceeded in "no responses" to general faculty conference, planning classroom projects, and meeting with school nurse or physician. Conferences with school or supervising dentist were most regular in N. Y. (44%).

Eighty-eight per cent of the hygienists provided services at annual intervals (Table 20); and 6% indicated varying intervals depending upon the service. Ninety-eight per cent of the N. Y. sample provided annual

services as compared to 77% for "other" states. Thirteen per cent of the latter group varied intervals from one to three or more years.

Discussions and Conclusions

Dental hygienists from the beginning have been employed in schools, and the trend has been toward increasing public health service and school health programs. It has been estimated that about 75% of dental hygienists employed by local government agencies, are working in schools. (10) Their future is potentially great in teaching basic skills and a knowledge of good dental health. This is being done in schools through a variety of services, as, inspections, dental and fluoride prophylaxes, conferences, resource materials, individual and group teaching.

When total pupil registrations in schools employing dental hygienists are considered, it becomes apparent that only a small portion are being referred for professional attention. The high incidence of dental disease among children further accentuates limitations of programs due to shortages of skilled personnel.

Very few states had specific policy or statutes defining functions of dental hygienists in schools. Conn. refers to her duties as a dental hygiene teacher and instructor in dental health. Penn. certificates the eligible dental hygienist for school service. N. Y. outlines the duties of the dental hygiene teacher under statutes of the professional practice act and regulations governing certification.* Many respondents indicated that state education and health agencies cooperated with schools in providing informational and technical assistance.

Only a small proportion of the school systems sampled demonstrated specific manuals on the dental hygienists' services. Most depended upon publications of private and public health agencies, and material from the American Dental Association. The shortage of educational information and program guides reflect limited administrative and supervisory controls by the schools. Some programs in California, Michigan, New York, Pennsylvania and a few other areas utilized descriptive guides for school dental hygiene personnel. A few programs supplied adequate informational literature to the children and parents.

At best only tentative conclusions may be drawn at this stage. The Committee has not attempted to examine the quality of duties performed by the dental hygienist. However, the large reserve of information may help to formulate general standards in evaluating and improving school services. The high proportions of children receiving professional care in N. Y. and Penn. may possibly be due to more college education, higher percentages of certificated dental hygienists, or higher remuneration; or lower follow-through percentages in Conn. and "other" states might be attributed to the relatively greater numbers of hygienists engaged by local health agencies than in Penn. or N. Y.

More emphasis must be given to dental health education for all grade children. The average child is not sufficiently motivated regarding dental care. Close to half of the 2613 grades had not received instruction. Shortages of manpower in schools and private practice make problems of education and prevention more acute.

*Except for New York City, Buffalo and Rochester.

Dental health is related to all areas of school health: administration, instruction, environment and services.(11) Many community agencies have valuable contributions to make in program planning, development and evaluation. Greater interest should be focused on improving inter-staff communication, and promoting programs by enlisting the aid of others in the school and community. A large percent of dental hygienists noted no meetings with faculty, dentist or nurse; or did not respond to the question of staff meetings. Adequate public relations and public education require contacts with people relating problems of the teeth to basic needs and desires as part of a function in their lives. The challenge involved in changing values for dental health through educational motivation is formidable but not insurmountable. Continuous investigation will provide scientific evidence to guide us toward satisfactory solutions.

TABLE 1. GEOGRAPHIC DISTRIBUTION OF SCHOOL DENTAL HYGIENISTS RETURNING THE QUESTIONNAIRE

New York	43%
Pennsylvania	15%
Connecticut	10%
Other	32%
	100%

TABLE 2. NUMBER OF YEARS OF COLLEGE WORK COMPLETED BY 201 DENTAL HYGIENISTS EMPLOYED IN SCHOOLS, ACCORDING TO STATE IN WHICH EMPLOYED

YEARS OF COLLEGE	TOTAL DENTAL HYGIENISTS	CONN.	N. Y.	PENN.	OTHER*
Total Hygienists	201	20	86	30	65
1 Year	29%	61%	27%	30%	22%
2 Years	34%	22%	47%	23%	26%
3 Years	13%	6%	14%	13%	14%
4 Years	19%	11%	9%	23%	30%
5 or more years	5%	0	3%	11%	8%

*Cf., A Preliminary Report by the Committee, J. of School Health, Feb. 1959, p. 73.

TABLE 3. PERCENTAGE OF DENTAL HYGIENISTS EMPLOYED IN SCHOOLS IN SELECTED STATES BY CERTIFICATION STATUS

TYPE OF CERTIFICATION	TOTAL DENTAL HYGIENISTS	N. Y.	PENN.	CONN.	OTHER*
Total Hygienists	201	86	30	20	65
Provisional	34%	45%	43%	15%	22%
Permanent	40%	50%	57%	35%	22%
No certification or no response	26%	5%	0	50%	56%

*Cf., A Preliminary Report by the Committee, J. School Health, Feb. 1959, p. 73.

TABLE 4. LENGTH OF TIME SINCE LAST PREPARATORY OR INSERVICE TRAINING FOR DENTAL HYGIENISTS EMPLOYED IN SCHOOLS, ACCORDING TO STATE IN WHICH EMPLOYED

LENGTH OF TIME SINCE LAST TRAINING COURSE	TOTAL DENTAL HYGIENISTS	CONN.	N. Y.	PENN.	Other*
Total Hygienists	201	20	86	30	65
1 Year	34%	15%	42%	47%	25%
2–5 Years	36%	20%	43%	13%	43%
6–9 Years	5%	0	6%	3%	6%
10 Years and over	18%	40%	7%	34%	18%
No response	7%	25%	2%	3%	8%

*Cf.. A Preliminary Report by the Committee, J. School Health, Feb. 1959, p. 73.

TABLE 5. LENGTH OF SERVICE FOR DENTAL HYGIENISTS IN SCHOOL PROGRAMS ACCORDING TO PREVIOUS EXPERIENCE AS HYGIENIST IN OTHER THAN SCHOOL PROGRAMS

YEARS EXPERIENCE IN SCHOOLS	TOTAL DENTAL HYGIENISTS	YEARS EXPERIENCE OTHER THAN SCHOOLS**			
		OFFICE	GOV'T* SERVICE	INDUSTRY, PRIVATE, VOLUNTARY	ADMINIST., RESEARCH, TEACHING
Total Hygienists	201	201	201	201	201
Under 5 years	30%	43%	18%	3%	5%
5–9 years	14%	13%	4%	1%	0
10–14 years	17%	4%	1%	0	0
15–19 years	8%	3%	1%	1%	1%
20 years and over	23%	3%	1%	0	0
No response or no experience	8%	34%	75%	95%	95%

*National, State, Local, Public Health, Veterans, Armed Forces, Institutions.
**Includes Part-time.

TABLE 6. PROFESSIONAL AFFILIATIONS OF DENTAL HYGIENISTS WORKING IN SCHOOLS ACCORDING TO STATES IN WHICH EMPLOYED

PROFESSIONAL AFFILIATIONS	PERCENTAGE OF AFFILIATIONS	CONN.	N. Y.	PENN.	OTHER***
Total number of affiliations	581	40	294	101	146
American Dental Hygienists Association	25%	30%	19%	27%	34%
National Education Association	9%	5%	7%	22%	7%
American School Health Association	4%		6%	1%	3%
American Public Health Association	2%		3%	1%	5%
American Association of Health, Physical Education and Recreation	9%	8%	14%	1%	5%
Other*	27%	30%	28%	25%	25%
Local**	24%	27%	23%	23%	21%

*State, Health and Education Organizations.
**District and Zone Health and Teachers Groups.
***Cf., A Preliminary Report, J. School Health, Feb. 1959, p. 73.

TABLE 7. PERCENTAGE OF DENTAL HYGIENISTS WORKING IN SCHOOLS ACCORDING TO AGENCY BY WHOM EMPLOYED AND BY GEOGRAPHIC LOCATION

EMPLOYING AGENCY	TOTAL DENTAL HYGIENISTS	CONN.	N. Y.	PENN.	Other*
Total Hygienists	201	20	86	30	65
Board of Education	85%	70%	95%	100%	69%
Board of Health	13%	25%	4%		28%
Other**	2%	5%	1%		3%

*Cf., A Preliminary Report, J. School Health, Feb. 1959, p. 73.
**Self-supporting town, county and state health agencies.

TABLE 8. SALARY OF DENTAL HYGIENISTS ACCORDING TO YEARS OF EXPERIENCE

SALARY	TOTAL DENTAL HYGIENISTS	YEARS OF EXPERIENCE				
		UNDER 5 YRS.	5–9 YRS.	10–14 YRS.	15–19 YRS.	20 years AND OVER
Under $2000	3%		6%	7%		4%
$2000–2999	3%	2%		4%	7%	1%
$3000–3999	25%	37%	39%	25%	17%	17%
$4000–4999	37%	59%	44%	36%	30%	25%
$5000–5999	25%	2%	6%	24%	39%	38%
$6000 and over	7%		5%	4%	7%	15%
Total	197	46	18	28	30	75

TABLE 9. SALARY OF DENTAL HYGIENISTS ACCORDING TO AGENCY BY WHOM EMPLOYED

SALARY GROUP	TOTAL DENTAL HYGIENISTS	AGENCY		
		BOARD OF EDUCATION	BOARD OF HEALTH	OTHER*
Total	201	170	26	4
Under $2000	3%	2%	8%	
$2000–2999	3%	1%	15%	
$3000–3999	25%	21%	43%	75%
$4000–4999	36%	39%	19%	25%
$5000–5999	25%	27%	15%	
$6000 and over	8%	10%		

*Self-supporting town, county and state health agencies.

TABLE 10. SALARY OF DENTAL HYGIENISTS ACCORDING TO YEARS COMPLETED IN COLLEGE

SALARY GROUP	TOTAL DENTAL HYGIENISTS	YEARS COMPLETED IN COLLEGE 1	2	3	4	5 OR MORE
Total	195	56	67	26	36	10
Under $2000	3%	9%				10%
$2000–2999	3%	5%	1%		3%	
$3000–3999	25%	25%	30%	23%	22%	
$4000–4999	36%	29%	40%	31%	45%	40%
$5000–5999	25%	25%	20%	38%	25%	40%
$6000 and over	8%	7%	9%	8%	5%	10%

TABLE 11. SALARIES OF SCHOOL DENTAL HYGIENISTS, BY STATES*

SALARY	TOTAL DENTAL HYGIENISTS	CONN.	N. Y.	PENN.	OTHER**
Total	201	20	86	30	65
Under $2000	3%	15%			6%
$2000–2999	2%				6%
$3000–3999	27%	55%	12%	28%	37%
$4000–4999	35%	25%	42%	40%	26%
$5000–5999	26%	5%	33%	32%	20%
$6000 and over	7%		13%		5%

*Less than 4% were part-time.
**Cf., A Preliminary Report, J. of School Health, Feb. 1959, p. 73.

TABLE 12. NUMBER OF SCHOOLS FOR WHICH DENTAL HYGIENISTS ARE RESPONSIBLE, BY STATE

NUMBER OF SCHOOLS	TOTAL HYGIENISTS	CONN.	N. Y.	PENN.	OTHER*
Total	194**	19	84	30	61
1	4%		7%		2%
2	3%	5%	5%		
3	8%	5%	13%	10%	2%
4	10%	10%	17%	3%	3%
5	10%	16%	14%	10%	3%
6	7%	10%	5%	13%	7%
7	8%	10%	7%	13%	7%
8	7%	5%	10%	13%	2%
9	6%		6%	3%	10%
10 or more	37%	39%	16%	35%	64%

*Cf., A Preliminary Report, J. of School Health, Feb. 1959, p. 73.
**No response—7.

TABLE 13. DENTAL HYGIENISTS SERVING SCHOOL CHILDREN BY GROUPS AND GEOGRAPHIC LOCATION

NUMBER OF PUPILS	TOTAL HYGIENISTS	CONN.	N. Y.	PENN.	OTHER*
Total Hygienists	189	17	86	29	57
Under 1000	6%	12%	1%	7%	11%
1000–1999	33%	23%	37%	37%	28%
2000–2999	26%	18%	33%	36%	14%
3000–3999	14%	23%	15%	14%	9%
4000–4999	10%	18%	7%		15%
5000 and over	11%	6%	7%	6%	23%

*Cf., A Preliminary Report by the Committee, J. School Health, Feb. 1959, p. 73.

TABLE 14. SERVICES PROVIDED BY THE SCHOOL DENTAL HYGIENIST TO PRIMARY, JUNIOR AND SENIOR HIGH STUDENTS, BY GRADE

SERVICES PROVIDED	TOTAL GRADES	PERCENTAGE OF GRADE GROUPS		
		PRIMARY	JUNIOR HIGH	SENIOR HIGH
Total Grades	1547	1088	301	158
Inspections only	46%	41%	56%	61%
Prophylaxis only	7%	7%	6%	7%
Fluoride prophylaxis	1%	1%	1%	
Inspection and dental prophyalxis	38%	40%	32%	32%
Inspection, Prophylaxis and Fluoride	8%	11%	5%	
Assist dentist	216	79%	16%	5%

TABLE 15. DENTAL HEALTH EDUCATION BY SCHOOL HYGIENIST ACCORDING TO PRIMARY, JUNIOR AND SENIOR HIGH PUPILS

NATURE OF INSTRUCTION	TOTAL GRADES	PERCENTAGE OF GRADE GROUPS		
		PRIMARY	JUNIOR HIGH	SENIOR HIGH
Total Grades	2613	1407	603	603
Chairside instruction	16%	11%	24%	17%
Classroom teaching	14%	22%	9%	2%
Chairside and classroom teaching	28%	46%	11%	4%
No educational services or no response	42%	21%	56%	77%

TABLE 16. SCHEDULE OF DENTAL HYGIENISTS' CLASSROOM ASSIGNMENTS ACCORDING TO STATE IN WHICH EMPLOYED

CLASSROOM SCHEDULE	TOTAL HYGIENISTS	CONN.	N. Y.	PENN.	OTHER*
Total Hygienists	201	20	86	30	65
Regularly scheduled classroom assignments	40%	30%	42%	47%	39%
Occasional classroom assignments	47%	40%	55%	30%	45%
No class assignments	13%	30%	3%	23%	13%

*Cf., A Preliminary Report by the Committee, J. School Health, Feb. 1959, p. 73.

TABLE 17. LENGTH OF AVERAGE CLASSROOM TEACHING PERIOD FOR DENTAL HYGIENISTS ACCORDING TO STATE

LENGTH OF CLASS PERIOD	TOTAL HYGIENISTS	CONN.	N. Y.	PENN.	OTHER*
Total Hygienists	175	11	80	28	56
15 minutes	16%	18%	11%	21%	20%
15–30 minutes	61%	55%	63%	50%	66%
30 minutes and over	16%	9%	20%	25%	7%
Varies	7%	18%	6%	4%	7%

TABLE 18. PERCENTAGE OF CHILDREN REFERRED FOR DENTAL CARE AND RECEIVING CARE FROM PRIVATE DENTISTS AND CLINICS ACCORDING TO STATES

REFERRALS AND FOLLOW-THRU	TOTAL CHILDREN	CONN.	N. Y.	PENN.	OTHER*
Total Number Referred	292,769	20,524	117,475	32,626	122,144
Received service from private dentist	52%	31%	71%	51%	36%
Received service from clinic	6%	5%	5%	4%	7%
Did not receive service	42%	64%	24%	45%	57%

*Cf., A Preliminary Report by the Committee, J. School Health, Feb. 1959, p. 73.

TABLE 19. FREQUENCY WITH WHICH DENTAL HYGIENISTS MEET WITH OTHERS CONCERNED WITH SCHOOL HEALTH ACCORDING TO GEOGRAPHIC LOCATION

LOCATION		TYPES OF CONFERENCES			
FREQUENCIES		GENERAL FACULTY CONFERENCES	PLANNING CLASSROOM PROJECTS	SCHOOL OR SUPERVISING DENTIST	SCHOOL NURSE OR PHYSICIAN
OCCASIONALLY	Conn.	10%	9%	8%	6%
	N. Y.	41%	46%	47%	38%
	Penn.	16%	13%	14%	19%
	Other*	33%	33%	31%	36%
	Total	100%	100%	100%	100%
REGULARLY	Conn.	4%	7%	6%	13%
	N. Y.	60%	52%	44%	45%
	Penn.	11%	3%	15%	12%
	Other*	25%	38%	35%	30%
	Total	100%	100%	100%	100%
NEVER	Conn.	17%	17%	25%	8%
	N. Y.	27%	23%	37%	42%
	Penn.	17%	29%	19%	17%
	Other*	39%	31%	19%	33%
	Total	100%	100%	100%	100%
NO RESPONSE	Conn.	11%	6%	24%	11%
	N. Y.	50%	50%	18%	56%
	Penn.	11%	22%	18%	11%
	Other*	28%	22%	40%	22%
	Total	100%	100%	100%	100%

*Cf., A Preliminary Report by the Committee, J. School Health, Feb. 1959, p. 73.

TABLE 20. TIME INTERVALS FOR SERVICE PROVIDED BY SCHOOL DENTAL HYGIENISTS ACCORDING TO GEOGRAPHIC AREA

TIME INTERVALS OF SERVICES	PERCENT OF HYGIENISTS	CONN.	N. Y.	PENN.	OTHER*
Total Hygienists	194	19	84	29	62
Annually	88%	90%	98%	86%	78%
Every two years	4%		2%	7%	6%
Every 3 or more years	2%	5%			3%
Varies**	6%	5%		7%	13%

*Cf., A Preliminary Report by the Committee, J. School Health, Feb. 1959, p. 73.

**The majority of all sampled dental hygienists provided annual dental inspections and other services at varying intervals.

REFERENCES

1. Committee on Dental Health Programs in Schools. A Preliminary Report, Jour. School Health, Feb. 1959, pp. 73.
2. Advisory Committee, Northeastern Society of Orthodontists.
3. Bureau of Economic Research and Statistics, Family Dental Survey, Jour. A.D.A., Nov. 1953, pp. 575.
4. Ibid. A Motivational Study of Dental Care, Jour. A.D.A. Mar. to June, 1958.
5. Price, Bronson. School Health Services, U. S. Dept. Health, Education and Welfare, 1957.
6. Kilander, H. F. National Survey of Dental Aspects of School Health Services, Jour. A.D.A. 51: 159, Aug. 1955.
7. Bureau of Economic Research and Statistics, A Survey of Public School Dental Programs, Jour. A.D.A., Nov., 1955.
8. Health Manpower Source Book, Dental Hygienists, U. S. Dept. Health, Education, and Welfare, 1957.
9. Committee on Dental Health Programs in Schools, A Preliminary Report, Jour. of School Health, Feb. 1959, pp. 73.
10. Pelton, Walter J., et al. Health Manpower Source Book, Dental Hygienists, U. S. Department of Health, Education and Welfare, 1957.
11. Young, Marjorie. How Dentists and Schools can Cooperate, Bulletin of the National Association of Secondary School Principals, 1958.

NURSE

Interested in Health Education wanted for progressive School Health program for school year 1960–1961. Public health preparation required. On teachers' salary schedule. Apply to:—

Ruth Thompson, R.N., Beloit Public Schools,
Beloit, Wisconsin

NEWS NOTES OF INTEREST

• *Spectrum* published by Pfizer Laboratories features school health as the theme of the October-November, 1959 issue. Eight articles by prominent physicians are focused on the physicians's role in the modern school health program. Specific attention is directed towards the school physician in a large city, school health and the pupil, the school health team, the modern role of the school physician, the school physician in a small community, school health expenditures, and school health perspectives.

• A report on the activities of four United Nations Agencies relating to health education, disease control, and health services is the subject of a pamphlet entitled "International Health Activities and the School" published by the National Education Association's Committee on International Relations. Programs of the World Health Organization, Food and Agriculture Organization, United Nations Educational, Scientific and Cultural Organization, and the United Nations Children's Fund are described. Summarized in chart form are the activities in which each of these agencies are engaged in promoting health education throughout the world. For each country listed there appears the name of the agency which is actively carrying on work in the areas of disease control and eradication, training of national staff and research, and general health services. The publication was produced to coincide with the theme of the World Confederation of Organizations of the Teaching Profession for 1959–1960: "Child Health and the School."

• A "Writers' Handbook for the Development of Educational Materials" has been published by the office of Education and may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. for $1.00. The 183-page manual is the result of the first Washington workshop for the development of educational materials, a cooperative project of the International Cooperation Administration. Participants at the conference included some twenty representatives from thirteen different countries. The material contained in the manual is particularly geared towards those with responsibilities for preparing materials in overseas' missions.

• The School Health Bureau of the Metropolitan Life Insurance Company which publishes the *Health Bulletin For Teachers* has selected "Teacher Leadership in Health" as the theme for the 1960 quarterly bulletins. The first Bulletin is devoted to Recent Progress in Medicine and Public Health, and carries a special insert on the 1960 census. Future bulletins will be directed towards the following topics: "Health as Total Fitness for Living," "Opportunities for Teacher Leadership in Health," and "How Health May Gain Value in the Eyes of Youth." Teachers may request the Bulletin and a teachers' guide for each issue from the School Health Bureau, Metropolitan Life Insurance Company, One Madison Avenue, New York City.

• "Youth and the Life Cycle" is the subject of an interview with Erik H. Erikson who ten years ago in his book "*Childhood and Society*" advanced a life cycle theory of personality development. The theory served as the

basis for fact-finding material for the 1950 White House Conference on Children and Youth and is presented in the March-April issue of *Children*. In light of the theory presented a decade ago the Editor of the publication confronted the originator of the theory with some challenging questions pertinent to the theme of the 1960 White House Conference on Children and Youth.

• A summary of the reports prepared by the states and by national voluntary organizations for the recent White House Conference on Children and Youth appears in the March-April issue of *Children*. The complete reports are to be found in two of the fact-finding publications prepared for the Conference. They are: "The States Report on Children and Youth" and "Focus on Children and Youth." Of the six White House Conferences held to date only the last two have involved participation by citizens. The early conferences were organized and attended by child welfare specialists, educators, and specialists.

The extent of citizen participation is reflected in the report prepared by the state of Texas in which the Governor invited all nine million of the citizens to write to him indicating what they considered the most important problems affecting the State's youngsters. The result was contributions prepared by 1,807,008 people, with 180 counties organizing committees to survey existing conditions.

• More about smoking among teen-agers is a summary of a study by Daniel Horn titled "Modifying Smoking Habits in High School Students" which may be found in the March-April issue of *Children*. In a program of educational activities five different approaches were used: (1) *Contemporary approach* which emphasized the current meaning of smoking to high school students; (2) *Remote approach* which described the relationship of ciagrette smoking to lung cancer; (3) *Both-sided approach* which presented both sides of the question of smoking; (4) *the Authoritative approach* which tested appeals to authority; and (5) the *Adult-role-taking approach* which gave the student the opportunity to provide information on the lung cancer-smoking relationship to his family. A statistical analysis of the results is presented. A significant finding of the study was that the "remote approach" was most effective with both sexes which contradicts the long accepted viewpoint that youth is mainly interested in short range goals.

• "The Role of Nutrition Education in Combatting Food Fads" is the report of a symposium on nutrition research and education, with specific emphasis on food fads and quackery. The publicaton emerged from a joint meeting of the Nutrition Foundation, Inc. and the Northern California Section of the Institute of Food Technologists. The 37-page report may be obtained on request from The Nutrition Foundation, Inc., 99 Park Avenue, New York 16, New York.

• *"Tested Methods of Raising Money for Churches, Colleges, Health and Welfare Agencies"* is a 1959 publication available from Harper and Brothers, New York City. The authors are Margaret M. Fellows and Stella Koenig.

• Reasons for concern about the diet of teen-age girls are discussed in an article by Dr. Gladys J. Everson in the January issue of the *Journal of the American Dietetic Association*. A high incidence of tuberculosis

and complications of pregnancy and birth of defective babies are two crucial problems presented in the paper titled "Why Worry About Teen-Agers' Diets."

• The enormous task of organizing the Golden Anniversary White House Conference on Children and Youth is reflected in the following statistics: 7000 participants, five theme assemblies, 18 forums, 68 discussion topics, 210 workgroups, 170 speakers, a three-volume set of opinions of experts, a report from fifty states, including eighty pages of recommendations, a 355-page volume reporting views of 500 national organizations, a 340-page report including 53 survey papers, an 84-page booklet of statistical charts, a 294-page publication of 32 survey papers and a supplement, and a volume of information sheets for each of the 18 forums. Eighty buildings scattered around the city of Washington, D. C. were reserved for the meetings of the various groups. Some 1600 recommendations were the final result of the Conference deliberations. Planning for the Conference has been going on for approximately four years. Thirty six reporters under the supervision of a city editor comprised the Conference reporting system. The first White House Conference called by President Theodore Roosevelt in 1909 included 200 participants.

• In the December, 1959 *Bulletin* of the Association for the Advancement of Instruction About Alcohol and Narcotics is the report of a study on the evaluation of materials suggested for alcohol education as found in available syllabi prepared by public school systems in the United States. The author, Arthur V. Linden, Director of Educational Studies of the Licensed Beverage Industries, Inc. calls for "clearing away the debris which now comprises the materials of alcohol education, and bringing to the teachers and young people alike, new, fresh, accurate, and honest viewpoints concerning alcoholic beverages and their use." The address of the Association that sponsored the study is 155 East 44th Street, New York 17.

• "Tuberculosis can be extinguished as a public health problem. . . . If the opportunity to end tuberculosis is not seized now, it may be lost indefinitely." These challenges regarding the problem of tuberculosis are discussed in detail in an article, "Approach to ZERO for Tuberculosis," which appears in the February, 1960 issue of *Public Health Reports*. The article is a report of a conference, called by the United States Public Health Service and the National Tuberculosis Association, of a distinguished panel of consultants.

• *Science News Letter*, January 16, 1960 reports that $67,000,000 worth of surplus foods were received by the nation's schools in the fiscal year of 1959 through the National School Lunch program.

• The Lester Taylor Memorial Scholarship is again being made available to college graduates working in some aspect of health, museum, or visual education. Those eligible may apply to the Scholarship Fund, Women's Committee, Cleveland Health Museum, 8911 Euclid Avenue, Cleveland 6, Ohio. The $500 scholarship provides the recipient with an opportunity to work at the museum on a project for six to twelve weeks during the year, at a time convenient for him. Miss Evelyn Midby, a staff nurse for

the Pasadena City Schools, is the present holder of the Lester Taylor Scholarship.

• A series of papers is scheduled for the *Health Education Journal*, published by the Los Angeles City Schools, "portraying the roles of various health personnel in the school health program-1960 version." The first article appears in the March, 1960 issue of the *Journal*. C. Morley Sellery, M.D. is the author of "The School Physician of 1960."

• SCOPE weekly published by the Upjohn Company, Kalamazoo, Michigan is an excellent resource for current advances in medical research and the health sciences. The March 9 issue carries highlights of articles such as, a report of a study of 285 children which shows a link of acute leukemia with diabetes, an alert to state health departments by the Communicable Disease Center relative to an expected sharp rise in hepatitis incidence over the next two years, statistics which reveal that an average of one teen-age case of venereal disease is reported every ten minutes, and the announcement that "an unidentified substance in peanuts can apparently control bleeding in antihemophilic factor hemophilia."

• "Perspective for the Sixties," the annual report of the American Heart Association reflects an optimistic note on the accomplishments of the Association in the fields of professional and public education, research, and service during the past decade since its re-organization as a national voluntary health agency. The AHA looks to the 1960's as "an era of even greater attainments in the fight against heart disease than the decade just past."

• An epidemiologic approach to the analysis of accident mortality data regarding host, agent, environment, and their interaction is the subject of an article by Albert P. Iskrant in the *American Journal of Public Health*, February, 1960. The writer reports that accidental deaths in general are most common at both extremes of life—under one and over 65. In contrast to the accidental *injury* rate which is high for the school age child, 5–14 years, the accidental *death* rate appears to be the lowest for this age group in the United States. The automobile, chairs, beds and the cooking stove were identified as the agents most closely associated with fatal accidents. The data reported on poisoning shows that aspirin was the most fatal drug. Upon reading the article one will find notable contrasts between the location and agent responsible for the fatal accident, as compared with the non-fatal accident.

• A recent survey by Helen M. Wallace and Helen M. Starr reports on the school health services currently being provided for handicapped children in 106 cities with a population of 100,000 and over. The authors state: "It is evident that proportionately more services are provided for those children who have an orthopedic, neuromuscular or neurological disability or who are mentally retarded, than for certain other children, especially the deaf, the blind, and the emotionally disturbed." The results of the survey are reported in an article, "School Services for Handicapped Children in Urban Areas" in the February, 1960 issue of the *American Journal of Public Health*.

• Having difficulty with your terminology in health education? Twenty-one frequently used terms, such as *operation, technics, baseline, evaluation, policy, need, standard of performance* and others appear in a glossary prepared by the Committee on Public Health Administration of the American Public Health Association. Refer to the *Association Journal* for February, 1960 for a complete listing of the terms and their definitions.

• "The Teenager and Venereal Disease" is the subject of an article by Gertude E. Cromwell in the December, 1959 issue of the *American Journal of Nursing.* Group teaching and individual counseling are cited as the approaches used by school nurses in one city school system in meeting this problem.

• Dr. Marie Hinrichs, formerly editor of *The Journal of School Health,* has joined the staff of the Department of Health Education of The American Medical Association on a "temporary, partial replacement basis," as she puts it.

• This Spring the City of Cincinnati loses the services, by retirement, of the veteran public health Commissioner Dr. Carl Wilzbach. Long a member and Fellow of the American School Health Association, Dr. Wilzbach has made significant contributions to the development of both school and public health. For five years he served as a representative of The American Medical Association on the Joint Committee on Health Problems in Education.

• A statistical report of the World Health Organization shows the ten principal causes of death in the modern world in fourteen countries. Heart disease (to which vascular lesions of the central nervous system are added), cancer and accidents are responsible for the greatest number of deaths. The countries included in the survey are Canada, United States, Germany, Denmark, Finland, France, Norway, Netherlands, England and Wales, Scotland, Northern Ireland, Sweden, Switzerland and Australia. The ten leading causes of death for each country are shown in graphic form in the January-February issue of *World Health.* Those interested in receiving this publication regularly may ask to be put on the mailing list. Address requests to: Pan American Health Organization, Regional Office of the World Health Organization, 1501 New Hampshire Avenue, N.W., Washington 6, D. C.

• Sixteen leading scientists from fourteen countries met recently at the Palais des Nations in Geneva, Switzerland to initiate the first international medical research program. An account of the meeting appears in the January-February issue of *World Health.*

• Teaching dental health on the junior and senior high school levels was the subject of a series of educational television programs for teachers presented by the University of Washington Department of Public Health and Preventive Medicine, Medical School and the Department of Dental Hygiene and Dental School. Miss Catherine Vavra of the Department of Public Health and Preventive Medicine served as coordinator of the program series.

* * * * *

THE PRESIDENT'S PAGE

Threats to School Health—Fact or Fancy?

C. MORLEY SELLERY, M.D.

Director, Health Education and Health Services Branch,
Los Angeles City Schools
Past-President, American School Health Association, 1944

Someone has said that every organization has within itself the seeds of its own destruction. History has presented us with innumerable illustrations of this truth. The Roman Empire decayed from within. The tyrannies of czarism spawned communism. Social orders survive or decay depending on whether they adjust to meet the changing needs of each period in history. The periods in history have become shorter. A short time ago we thought of changes occurring by generations, now we think of change in terms of decades or even shorter periods of time. In the business world a chemical or electronic discovery wipes out one business and starts another.

In our own field of interest, as we look back over the past thirty or forty years we have witnessed many changes. The nuisance diseases which kept school nurses going up and down classroom aisles looking at hands and hair have become in most areas a thing of the past. The swollen glands, the running ears, the chronic kidney disease which so often followed in the wake of virulent scarlet fever epidemics, and the multiplicity of chronic ailments which resulted from the uncontrolled communicable diseases of childhood, in the early 20th Century made the finding of physical defects with follow-up measures for correction the major school health emphasis of that era.

How well the school health movement met the challenges of this early period of our history has been the subject of countless articles. Undoubtedly, as in other fields, programs varied in quality from very good to very bad—or even were nonexistent. The "quickie" health examination which was carried on in some areas was so often pinpointed as a basic weakness that by association and inference the whole school health movement in many areas was held in disrepute.

With the control of the major communicable diseases through immunization, improved sanitation, and antibiotics, many child health problems which formerly occupied much of the time of school physicians and nurses have been eliminated.

In general, child nutrition has improved. Rickets, scurvy, and the more obvious vitamin deficiency diseases are now relatively rare. Children today tend to be taller and larger than their parents were at the same age. With higher standards of living, under-nutrition is less common. This is not to say that children today have perfect nutrition, but our nutrition problems today are related more to luxury living and unwise selection of foods than to deprivation. The marked prevalence of dental disease due to more money for candy and the excessive consumption of refined flour products and sweets of all types is a case in point. Have the advances in child health so reduced the field of usefulness of the school

health worker, the physician, dentist, or medical specialist, that he is no longer needed? There are some with eyes on the tax dollar and the increasing cost of education who would like to think so.

Studies have been made which seem to prove that most physical defects of school children can be screened out by classroom teachers, especially when assisted by school nurses. Such findings no doubt will be quickly grasped and welcomed by tax conscious citizenry eager to rid themselves of the financial cost of school physicians and dentists. Such wide publicity has been given to these studies and such importance attached to them that there is a real danger of educators, school board members, and even public health personnel jumping to the conclusion that defect-finding is still the one and only function of the periodic health examination, and, by inference, of the school physician or dentist. It would follow logically that school physicians and dentists can without much loss be dispensed with. In fact, some economy-minded communities have jumped to this conclusion and have forthwith eliminated the school physician from their school health services.

Since serious defects are still found by school physicians and dentists—defects which could be detected only by them—there would seem to be a real hazard to children in destroying public confidence in the value of the well-conducted periodic health examination. No one will deny that the early discovery of physical defects in childhood is essential to the prevention of more serious disabling conditions in later adult life, and is important to the development of optimum health, happiness, and efficiency.

There are, however, many other values inherent in the physical examination besides health appraisal. It can be a most effective and motivating health education experience for the child in which favorable attitudes toward healthful living are established. It provides the teacher with invaluable information concerning the health needs, capabilities, and problems of the children, and assists her to adapt the learning situation to the individual pupil.

The periodic health examination, when carried out with the same consideration and care which the well-trained doctor would show to the child of his most beloved friend or his most valued patient, will leave with the child a lasting impression favorable to continued health supervision by the family physician or dentist.

The point of view that dentists have no place in the school health program, except as consultants in dental health education, is widely held nationally. Those who proclaim this policy maintain that since all children should make regular visits to their dentist, dental examination at school is superfluous. In support of this position they point to some well-known studies which demonstrated that classroom teachers have been able to motivate as many children to seek private dental care as can be accomplished by school dentists or dental hygienists. It is conveniently overlooked that these studies have been made under specially structured situations and are completely invalid in terms of the regular school situations. Those who are familar with programs where the school dentists have served as resource persons in dental health education in the schools are aware of the highly motivating effect which the dentist, by virtue of his prestige, brings to the oral health instruction program.

Let us frankly admit, however, that contrary opinions are strongly

held and that there are serious threats to the school health program today. We must ask ourselves to what extent do they have a valid foundation. Do these threats constitute the seeds of destruction which result from our own weaknesses or rigidity in facing up to the challenge of a changing society and in meeting different health needs and problems of the times in which we live? Ignoring threats, challenges, or public criticism is the surest way to destruction of a program.

The school health program is not alone in being challenged, however. Probably never before in the history of our country has the public school system of America been subjected to so much criticism as at the present time. An increasing concern is felt by administrators and teachers at all levels with any factor or situation which might impede the educational progress of pupils in our schools.

Educators have long recognized that health is vitally important to the learning situation, that the partially-well child, the emotionally disturbed, the socially maladjusted, regardless of IQ, make poor educational progress and not only take an inordinate amount of teacher's time and energy but also create classroom situations of such tension and turmoil that the total learning process is impaired. Educators are faced as never before with the fact that all of the children of all the people come to school, and the public is demanding a level of achievement often with no regard to the individual mental capacities of children. Teachers are expected to educate to the maximum the slow learner, the mentally retarded, even the severely mentally retarded. They are expected to do a superb job with the exceptional or handicapped child of every type and condition. They are deeply concerned about the non-reader and with every reading failure in the classroom they fear public scorn. "Why Can't Johnny Read?" rings in their ears. The teacher is well aware that "all behavior is caused behavior," and is concerned with finding causes and eliminating obstacles which may be affecting a child's progress.

The classroom teacher and the administrator have a deep need to know what health factors are affecting the learning situation. They need to know in the case of the low achieving child, is his difficulty primarily educational or are there important physical, psychological, or emotional factors?

Another aspect of the present educational dilemma relates to the problems of health education. There is a general awareness among educators that the only ultimate solution to the more subtle and deep-seated health problems which young people face today is in a health education program which will provide young people not only with health knowledge but which will motivate them to become self-directing in the establishment of sound health practices. Health education is one of the most difficult of subject fields. It requires not only a great deal of basic knowledge but dedication and enthusiasm which will fire young people to put into practice the health knowledge given them in the classroom. Many teachers feel ill-prepared in this field yet have a teaching assignment which includes health education.

These are two areas of the school health program—health services and health education—where educators are looking to school physicians, dentists, nurses, and the allied professions for help, not only because of their basic interest in aiding pupils achieve their maximum potential but

also that every possible impediment to the learning process may be removed.

This is the challenge which the school health program faces today. It becomes a threat only if we fail to prepare ourselves to meet it. If the school physician is merely a defect finder, a routinist, he is on his way out. The school dentist solely as an examiner of teeth belongs to the past. The school health specialist of today must not only be expert in his field of medicine or dentistry, he must have superior training in mental health, growth and development, psychology, nervous and developmental disorders of children, juvenile delinquency and social maladjustment, and the health problems of the physically handicapped. He must understand problems of the administrator or the classroom teacher as they relate to education, and must feel a deep kinship with the educator in a profound desire to help each child achieve his optimal, educationally and as a human being.

The physician or dentist working in the schools is no longer accepted and respected merely because of his M.D. or his D.D.S. He must prove his right to respect and status within the school environment by gearing his professional background to the needs and problems of the school child.

* * * * *

TRENTON, NEW JERSEY STATE COLLEGE GIVES A B.A. IN SCHOOL NURSING

The Bachelor of Arts degree program in School Nursing offered at Trenton State College is designed primarily to assist in meeting the health needs of the schools of New Jersey. It endeavors to equip the nurse to work effectively with the school age child, his family and community from within the framework of the school organization, using the personnel and facilities of that framework to promote Health Education in its broadest sense—health service, environmental health and health instruction.

At present the offering is for the graduate nurse who desires professional public health education in the school area. College credit is granted for her basic nursing education and any additional college work that can be evaluated to fit into the program.

This does not qualify the nurse to meet classroom teacher certification, except, in the teaching of Home Nursing and First Aid. Additional study and practice experience is needed to be employed as a teacher of Health Education.

An opportunity to work for the School Nurse degree is given through the Field Service Division of the college. It is anticipated that a limited number of full time School Nurse students will be admitted in September 1960.

In general the course includes 30 semester hours of general education, 14 semester hours of basic professional education, and 24 hours of other professional specialized courses. About 60 hours credit is allowed for the basic nursing curriculum if given in an accredited school of nursing and the state boards have been passed.

Further information may be secured by contacting Mrs. Millicent X. Loeb, Assistant Professor of the School Nurse Program.

ECHOES FROM THE PAST

ELENA M. SLIEPCEVICH

Professor of Health Education
The Ohio State University

*". . . as we look back from some distant time in the future we will regard these early conferences and the publications thereof as the real genuine source of health education in this country."**

There is a renewed interest in the historical development of school health programs as several organizations and groups pause to commemorate a milestone of progress in their educational efforts. The purpose of this article is to look in retrospect at some of the "quotable quotes" which appear in the historical literature of school health education.

A survey of conference reports and philosophical discussions which have appeared in print reveals such a striking similarity to some of the same crucial issues that confront us today that the reader may be prompted to ask: "What's new in health education?"

However, a look at some of our achievements over the years recalls to mind at once several modern practices and trends which characterize our school and college programs today. Among these we might cite the broadened concept of the program, the changing and increasingly significant role of the school nurse, the recognition of the classroom teacher as a key person in the health appraisal program, the improvement in textbooks and teaching materials, including a broad scope of content based on student needs and interests, the strengthening of relationships between the professions of education and medicine, the cooperative efforts of official, professional and voluntary organizations, the slow, but certain progress in upgrading professional preparation of health education personnel and the recognition of the behavioral sciences and their implications for health education. These are some of the signs of progress with which we are familiar.

The references cited which follow do not in all cases indicate the first mention of the issue or subject in the professional literature, but rather reflect the attention which was focused on a given problem at a specific time.

1. Philosophy and Principles

"Sooner or later everything pertaining to education, from the site of the buildings to the contents of every textbook, and the methods of each branch of study must be scrutinized with all the care and detail at the command of scientific pedagogy and judged from the standpoint of health. What shall a child give in exchange for his health, or what shall it profit a child if he gains the whole world of knowledge and loses his own health?" p. 8 (G. Stanley Hall) 12 (1892).

"Health is not everything. It is not to be considered in itself as an exclusive end of living. It should not be the main or final goal of education. It is, however, an absolutely essential means to forms of human achievement of most worth. It is even more essential to the welfare of the future than of

*John M. Sundwall. From the title page of the report of the Fifth Health Education Conference, *School Health Progress*, Sayville, Long Island, New York, June 17–22, 1929.

the present, if the race is to progress and not deteriorate." p. 16 (Thomas D. Wood) 29* (1903)

"In the confusion of relative values, human health as one of the essential means to many worthy ends is usually neglected. . . . And by health I do not mean simply existence, freedom from pain or absence of disease, but rather, organic power and efficiency, the maximum vital ability possible to the individual for the doing of all that seems most worthwhile in life." p. 10 (Thomas D. Wood) 30* (1902)

"Health education, like moral education, involves not only a scientific foundation of facts and principles combined with an art of human conduct, but there is also needed special provision for motivation to furnish convincing and compelling reasons to bridge the gap between theory and practice; between knowledge and conduct." (Thomas D. Wood) 28* (1916)

"The teacher who is planning to study the health problems in any school considers first the fact that 'the whole child comes to school.' Physical, emotional, mental and social health need to be considered." p. 1 (Bellevue-Yorkville Health Demonstration) 1 (1929)

"Health Education can be promoted only by emphasizing all aspects of health—physical, mental, social, moral. The teacher of health should look for normal development of the child from all of these points of view. The ideal of health is not mere freedom from obvious deformities and pathological symptoms. It is the realization of the highest physical, mental and spiritual possibilities of the individual." p. 23 (Joint Committee of NEA-AMA) 15 (1924)

"School attendance is compulsory, and it seems to me we owe primarily to that child that it shall not suffer from the compulsion under which we put it. That seems to me the primary philosophical consideration, that if we compel a child to go to school, our job is to see that the child will be not worse off than if he had stayed at home, and it is up to us to prove that that is not the case at present." p. 125 (Haven Emerson) 4 (1929)

IV.

"Let us blow health education out of the doldrums with a strong breeze of steady, forward-thinking action." p. 3 (Marion Olive Lerrigo) 17 (1939)

II. Cooperative Relationships

"Just as health teaching in the elementary grades should, within reasonable limits, be diffused through the entire program of the school day, so health education in the high school, with departmentalized teaching, should be considered an interdepartmental problem and, as in the case of the liberal arts college or the teacher training institution, should be planned and supervised by an interdepartmental committee of those most interested in and best qualified to deal with this important subject." p. 52 (Thomas D. Wood) 25* (1928)

"It is the purpose of the Health Section to promote the quality of health work in the schools of the world (1) by making available to the leaders in each country a knowledge of activities and progress in other countries, (2) by the discussion of methods, and (3) by the formulation of sound programs and recommendations which through the endorsement of the World Federation will aid in securing national consents for improved health programs." p. 8-9 (Clair E. Turner) 32 (1929)

V.

"I never again will attempt to help a school system work out a health program if the doctors of the community do not first cooperate as a unit." p. 318 (Maud Brown) 4 (1929)

"Teaching children about health and supervising their physical well-being while in school may be largely ineffectual if the parents and adults of the community are not taught at the same time. The Board of Education and the Department of Health should work closely together to develop new types of adult education programs to reach parents." p. 326 (Dorothy B. Nyswander) 18 (1942)

III. Health Instruction-Curriculum Development

"As a means of teaching health, life situations are invaluable; as a means of testing health education, real problems are definitely superior to imaginary ones; as a means of bettering actual conditions, adolescent enthusiasm has a powerful influence on the powers which financially control schools." p. 59 (American Child Health Association) 3 (1927)

"Few courses of study in any subject have taken cognizance of the actual needs of the community which they are to serve, nor have they been sufficiently flexible to be readily altered as the needs have changed. In the organization of a curriculum, the educational value of any experience is measured by the degree to which desirable differences in conduct are made." p. 36 (Carolyn Hoefer) 5 (1929)

"We cannot lecture and quiz our students through normal school and college and then expect them to go out and teach by the problem method." p. 111 (Edna W. Bailey) 6 (1926)

"It is generally conceded that in recent years of teacher education, overemphasis has been given methods, with a consequent lack of subject matter. This is especially true in the field of health education." p. 241 (Philomena Supper) 2 (1933)

"We hope to produce a course of study which we feel will have been based upon careful scientific research, rather than upon empirical judgment, and using the student interests and questions. Personally I am satisfied that we have attacked the problem of making a course of study at its very heart." p. 117 (Delbert Oberteuffer) 4 (1929)

". . . teachers are still centering their thinking on the teaching techniques rather than on the learning process." p. 146 (Anne Whitney) 4 (1929)

"No time allotments or claims of other subjects should be allowed to crowd out sufficient time for appropriate health instruction. Health education as a purpose of first importance in schools is now freely and even emphatically advocated by practically all educators. Time for the work consistent with its admitted importance should be provided and used." p. 122 (Joint Committee of NEA–AMA) 16 (1930)

IV. Health Services

"A health examination is only an inquiry into a condition. Such an inquiry or survey implies a second step toward maintenance or improvement of that condition, based on what the examination reveals. It is the second step, the follow-up, which gives any value whatever to the first step, which is the examination." p. 27 (American Child Health Association) 3 (1927)

"It is evident that many of the schools recognize the importance, in connection with the program of defect correction, of having the physicians in the community understand the work of the school health service and of having them in sympathy with it." p. 32 (American Child Health Association) 3 (1927)

"There is a very large percentage . . . of the high school population which is suffering definite handicaps because of the high-school program. In attempting to correct health defects, we might find out what we are contributing toward producing them." p. 147 (Edna W. Bailey) 5 (1929)

V. Health of the Teacher

"Since the influence of the teacher's wholesome personality is so important in the mental health of students, it is highly desirable that schools have employment and certification qualifications relative to the mental health of teachers. It is equally important that schools promote the mental health of teachers in service and provide them with opportunities for fullest realization. Healthful personalities among teachers help to insure the development of wholesome personalities among students." p. 126 (American Child Health Association) 3 (1927)

"Some teachers are 'so busy,' have 'so much to do,' are in such a 'big hurry' that they have no time for anything but work. Teachers would do well to remember that the job of teaching never ends, but teachers do." p. 10 (George D. Brock) 7 (1922)

"For effective health education, every teacher should be a health teacher, and every teacher should be a health example." p. 8 (Thomas D. Wood) 27 (1929)

"I have simply taken for granted that any intelligent adult who goes through life without an annual periodic medical examination at his or her own expense is not worthy of being allowed in the school room." p. 137 (Haven Emerson) 4 (1929)

VI. Mental Health

"In order to avoid such a split in personality we must, as far as we can, bring it about that what the child does shall make positively for internal unity, for the integration of his personality." p. 20–21 (William H. Kilpatrick) 4 (1929)

"We cannot then rely on mere devices such as games, prizes, badges, and so on. Those things, you see, are immoral. They are not teaching the 'why' of things; they are not getting children to see the 'why' and live on the basis of 'why.' They are ways of getting around seeing the 'why.' I repeat it, these are immoral devices, in the long run hurtful. They essentially destroy the intelligent self that we wish most to build." p. 22 (William H. Kilpatrick) 4 (1929)

"Another positive indication of the formation of a new set of higher values is presented by the growing interest in mental hygiene, with its emphasis upon the extreme importance of the integration, the oneness, the unit of the personality of the individual . . ." p. 4 (Frederick W. Brown) 9 (1930)

"Whether we approve or disapprove of the mechanization and the rush of modern times, we have to accommodate ourselves to them and, what is more, we have to search for ways and means of making our manner of living under these new conditions as suitable and hygienic as possible, so that we may remain fresh, healthy, energetic and eager." p. 1 (A Report) 11 (1930)

VII. Nutrition

"One of the most valuable uses of the lunchroom—one which many schools are trying consciously to develop—is that of providing opportunity for girls and boys to meet and make social adjustments. The new spirit of education is changing classwork from a series of dull questions and answers to group enterprises in which each child has a part, in the doing of which such traits as cooperation, leadership, and initiative are developed." p. 54 (American Child Health Association) 3 (1927)

VIII. College Health Education

"His (the college student) experience with required undergraduate hygiene programs does not as a rule greatly alter or improve his health attitudes and sentiments or his ability to form wise judgments for the regulation of his behavior or the behavior of others in matters of individual, family, or community health." p. 111 (Thomas A. Storey) 21 (1927)

". . . before the teaching of college hygiene is given up as a failure, the subject matter should be reexamined and the elements of content so chosen that they will become related and identified with the problems of living." p. 97 (Delbert Oberteuffer) 19 (1930)

"Moreover, the possibility of a class ever being without a question or curiosity about a particular phase of living is more apparent than real. The students will have some reaction to any proposal or announcement. If they do not seem to want to press a subject further or to know more about it, the teacher should suspect that something is wrong with the subject and not with the students." p. 17 (Delbert Oberteuffer) 19 (1930)

"Antiquity is no longer a safe criterion of best practice. Content material for school and college courses must measure up to changing social and economic needs." p. 1 (Delbert Oberteuffer) 19 (1930)

IX. Physical Education and Health Education

"Physical educators, traditionally the health custodians of the schools, are being appointed to direct our health education, this being considered a logical development of 'physical education.' The results of this latter tendency require careful checking, to discover the effectiveness of the policy." p. 75–76 (American Child Health Association) 3 (1927)

"Whether physical education is a part of the health program, or the health work is part of the physical education program, is a question which gives promise of being perennial. The settlement of this issue with each individual will depend largely upon his previous training and point of view. It is generally accepted, however, that the close relationship of the two is such that if cooperation and coordination are lost during the debate of the issue, student welfare will suffer. p. 29 (Committee Report) 13 (1926)

"Now that public health is becoming more and more interested in

physical education and physical education in public health, it is well to have the two combined for teaching purposes. Let us call it a department of hygiene and physical education." p. 273 (John Sundwall) 20 (1923)

"Let us not allow ourselves to be jockeyed into a position of believing that everyone who directs an activity program must have a degree in public health or into the equally fallacious position of maintaining that every physical educator, no matter how scanty his scientific background, is a capable instructor in personal and community hygiene." p. 5 (Clair E. Turner) 22 (1933)

X. Professional Preparation

"Let human physiology be introduced as an indispensable branch of study into our public schools; let no teacher be approved who is not master of its leading principles, and of their applications to the varying circumstances of life." p. 244 (Horace Mann) 23 (1848)

"Every teacher, supervisor, principal and superintendent in the school should have a keen and intelligent appreciation of health values and interests, and of the measures necessary to preserve and foster them. If our general teachers and educators are to have this understanding of hygiene, which is essential to their necessary and effective cooperation in the united effort which is needed, there must be, beyond the general instruction in hygiene in school and college, thorough courses in school hygiene in all the normal and training schools and colleges for teachers." p. 17 (Thomas D. Wood) 29* (1903)

"Every now and then you hear some English teacher say that every teacher in the school ought to be an English teacher, and every teacher in the school ought to be a teacher of penmanship, and so on. If that is true, and I rather think it is to some extent, I think it is consistent for me to say every teacher should be a health teacher under competent supervision." p. 254 (Ned H. Dearborn) 4 (1929)

XI. Sex Education

"Instruction with reference to sex is, in many respects, the most vital and important phase of health education . . . Adequate instruction in sex hygiene cannot be given until: (a) Enlightened public opinion recognizes sufficiently the necessity for such instruction, and exhibits confidence in the ability of responsible advisors of children and youth to give instruction needed; (b) Teachers are intelligent, wise and tactful enough to give such instruction and guidance successfully. Comparatively few teachers today are capable, however, of meeting the obligations which are involved in relation to the subject." p. 23 (Thomas D. Wood) 24 (1910)

"At the present time, some universities, colleges and normal schools are carrying on carefully organized programs of instruction in social hygiene and eugenics. Scattered attempts in this field of health education have been made in a few high schools, but much systematic instruction in social hygiene in the secondary schools awaits the more general establishment of corresponding instruction in this subject in the higher institutions, especially in those where professional training is given to prospective teachers." p. 22 (Joint Committee of NEA-AMA) 15 (1924)

REFERENCES

1. "A First View of Health Education in Your School." Bellevue-Yorkville Health Demonstration, October, 1929. (Mimeographed)
2. American Child Health Association. *Advances in Health Education.* Seventh Health Education Conference, University of Michigan, Ann Arbor, June 20–24, 1933. Published 1934.
3. American Child Health Association. *Health Trends in Secondary Education.* New York: The Association, 1927.
4. American Child Health Association. *Principles and Practices in Health Education.* Sixth Health Education Conference, Sayville, Long Island, June, 1930.
5. American Child Health Association. *School Health Progress.* Fifth Health Education Conference. Sayville, Long Island, June 17–22, 1929.
6. Bailey, Edna W., "The Scientific Foundation of the Health Teacher's Professional Training." *Some Tendencies in Health Education.* Published by the American Child Health Association, New York City, 1926.

7. Brock, George D., "A Study of the Physical Condition and Comparative Development of the Colored Women Teachers of West Virginia," Reprint from *The West Virginia Collegiate Institute Bulletin*, September, 1922, Series 9, No. 3, Institute, West Virginia, The West Virginia Collegiate Institute.
8. Brown, Maud A. "Health Program in the Kansas City Schools, 1919–1921." Reprinted from *The Elementary School Journal*, Vol. XXII, No. 2, October, 1921.
9. Brown, Fredrick W., "Life's Higher Values," *Mental Hygiene Bulletin*, Vol. III, No. 9, November, 1930. Published by The National Committee for Mental Hygiene.
10. Courtis, Stuart A., "Growth and Development in Children." American Child Health Association. *Advances in Health Education*. Seventh Health Education Conference, Ann Arbor, Michigan: University of Michigan, June 20–24, 1933.
11. "Do You Know What 1930 in Dresden Means"? American Headquarters, 393 Seventh Avenue, New York City (brochure on International Hygiene Exhibition, Dresden, 1930).
12. Hall, G. Stanley. Editorial in *Pedagogical Seminary* II, 1892.
13. *Health Service in American Colleges and Universities*. University of Michigan Bulletin, Vol. XXVIII, No. 11, September 11, 1926.
14. Hoefer, Carolyn, "Increasing the Efficiency of Health Instruction in the Public Schools." Reprinted from *The Elementary School Journal*, Vol. XXII, No. 1, September, 1921.
15. Joint Committee on Health Problems of the National Education Association and the American Medical Association. *Health Education*. A Program for Public Schools and Teacher-Training Institutions. Report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, 1924.
16. Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. *Health Education*. A Program for Public Schools and Teacher Training Institutions. Second Edition. Washington: National Education Association, 1930.
17. Lerrigo, Marion Olive. *Traditional Education*. Reprint from Hygeia (now *Today's Health*), October, 1939. Bureau of Health Education, American Medical Association.
18. Nyswander, Dorothy B. *Solving School Health Problems*. The Astoria Demonstration Study. New York: The Commonwealth Fund, 1942.
19. Oberteuffer, Delbert. *Personal Hygiene for College Students*. A Study of the Curiosities, Interests and Felt Needs of College Students in the Subject Matter of Personal Hygiene. New York: Teachers College, Columbia University, Bureau of Publications, 1930.
20. Report of International Health Education Conference of the World Conference on Education, San Francisco, June 28-July 6, 1923.
21 Storey, Thomas A., M.D., *The Status of Hygiene Programs in Institutions of Higher Learning in the United States*. A Report for the President's Committee of Fifty on College Hygiene. Stanford University Press, Stanford University, California, 1927.
22. Turner, C. E., "Health Education and Its Relation to Physical Education." Reprinted from the *Journal of Health and Physical Education*, June, 1933, Vol. II, No. 6.
23. Twelfth Annual Report of the Secretary of the Board of Education of Massachusetts for 1848, in Mary Mann, *Life of Horace Mann*. Boston: Lee and Shepard, 1891, Vol. IV.
24. Wood, Thomas D., "Considerations Relating to the Effective Teaching of Hygiene," in *The Ninth Yearbook of the National Society for the Study of Education*. Part I: "Health and Education," Bloomington, Illinois: Public School Publishing Company, 1910.
*25. Wood, Thomas D., "The Contributions of Health Education to Race Betterment." Reprinted from *Proceedings of the Third Race Betterment Conference*, January 2–6, 1928.
*26. Wood, Thomas D., Extracts from *Health Problems in Education*. Reprinted from the Proceedings of the Sixth Congress of the American School Hygiene Association, 1912.
27. Wood, Thomas D., "Health Education." Reprinted from the *New England Journal of Medicine*, Vol. 200, No. 14, April 4, 1929.

*28. Wood, Thomas D. "How May the School Be Made an Effective Health Agency?" Paper presented before the Second Pan-American Scientific Congress, Washington, D. C., December 27, 1915–January 8, 1916.
*29. Wood, Thomas D. "Selections from School Hygiene in Its Bearing on Child Life." Reprinted from the *Proceedings of the National Education Association*, 1903.
*30. Wood, Thomas D. "Some Controlling Ideals of the Family Life of the Future." Reprinted from *Proceedings of the Fourth Lake Placid Conference on Home Economics*, 1902.
31. Winslow, C. E. A., "Objectives and Content of Formal Instruction in Hygiene," *Report of the First Health Education Conference*, Lake Mohonk, New York, 1922.
32. *A World Panorama of Health Education*, Health Section, World Federation of Education Associations, Geneva, Switzerland, July 27–August 2, 1929. Published in 1930 by ACHA and Metropolitan Life Insurance Company.

*Reprinted in *Selections from the Addresses of Thomas D. Wood*, New York City: Teachers College, Columbia University, 1932.

* * * * *

PRE-CONVENTION MEDICAL MEETING

The Second Pre-Convention School Health Section of the American School Health Association and the American Medical Association will be held in the Medallian Room of the Carolon Hotel, Miami Beach, Sunday, June 12th, 7:30 p.m. The preliminary program will include:

Presiding, Donald A. Dukelow, M.D., American Medical Association and American School Health Association.

Greetings from the American Medical Association, Louis M. Orr, M.D., President.

Greetings from the American School Health Association. An officer of the Association.

Trends in School Health Instruction, Zollie Maynard, Florida Department of Education, Tallahassee, Florida.

Preventive Dental Health in the Schools, Richard L. Mathewson, D.D.S., Chairman, Dental Health Committee, Dade County Welfare Planning Council, Miami Beach.

School Nursing (To be announced).

The Family Doctor and School Child Health, Warren W. Quillian, M.D., Chairman, Committee on Child Health, Florida State Medical Association, Coral Gables, Florida.

The Health Department Role in School Health (To be arranged).

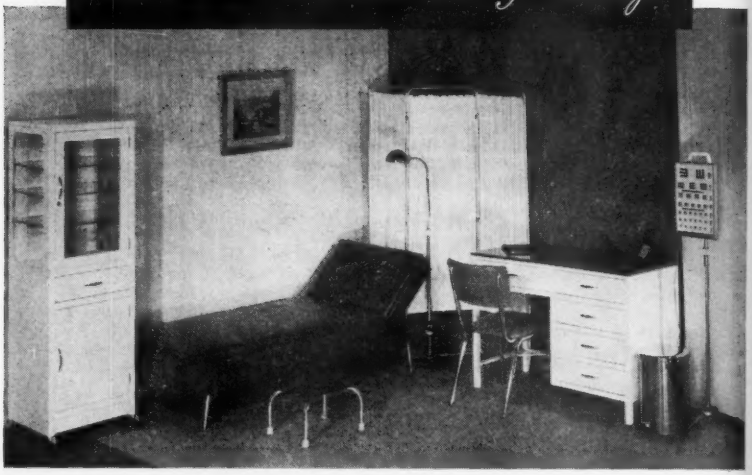
Discussion.

Commentary, Donald A. Dukelow, M.D.

All persons interested in school health, whether members of the A.M.A. or the A.S.H.A., or not, are cordially invited. Persons attending who are not physicians may obtain badges that will admit them to the Associations' exhibits.

* * * * *

The ultimate in school health furnishings



SCHOOL HEALTH SUPPLY CO.

7426 Madison Street, Forest Park, Illinois

Now you can buy direct from the manufacturer of a complete line of school health furnishings and SAVE! Designed specifically with the needs of the school nurse in mind . . . you can be sure of quality construction and long lasting values.

Send coupon for your personal copy of the School Health Supply catalog.

Please ship me the following items I have checked contained in your No. 800 suite:

☐ S-800	Chromium adjustable examining light	$ 14.75
☐ S-801	Single door instrument cabinet in jade green, white or ivory	$145.00
☐ S-802	Nurse's desk — stainless steel top in jade green, white or ivory	$135.00
☐ S-804	3 panel aluminum screen, Vinyl, 67" x 60", white or green	$ 34.50
☐ S-805	Palmer recovery couch with tough U.S. Naugahyde covering and adjustable finger-tip dual control back. In white, crimson, avacado, ginger brown, blue, grey, black, sandlewood and coral	$135.00
☐ S-810	Good-Lite Model A eye chart complete with standard 2 cards	$ 46.50
☐ S-816	Detecto scale balance beam (not shown)	$ 65.00

☐ Please send the complete School Health Catalog.

Name_____

School_____

Address_____

City_____ Zone_____ State_____